U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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MANGANESE IN AUGUST 1996

In August, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, rebounded to 40,000 metric tons, which was the greatest of the year to date, according to the U.S. Geological Survey. This brought the revised year to date total to 270,000 tons. These figures increase to 44,500 and 306,000 when estimates for annual respondents are added on the basis of 1994 data. Corresponding industry stocks of ore at the end of the month were estimated as 315,000 tons, which includes an estimate for annual respondents based on 1994 data. This was a slight increase of somewhat more than 1% in comparison with the corresponding figure for stocks at the end of July. (Data for the most recent 13 months are graphed on page 3.)

The next report of data on domestic consumption and stocks of manganese ferroalloys and metals will pertain to the July through September quarter of 1996.

Notice

Early availability of foreign trade statistics via FaxBack: The July trade data appearing in this report were placed on FaxBack in preliminary form as of September 26. The FaxBack document number for these preliminary tables was 420207.

Foreign trade data for August will appear in a subsequent report. The data for July tabulated in this report indicated that the volume of foreign trade for ferroalloys and metal in general and for silicomanganese in particular was small in comparison with that for other current months. For silicomanganese, imports were the least since December 1985 and exports the least since September 1991. For the combined total of manganese units contained in ferroalloys and metal, imports were the least since February 1990 and were only about 40% of the monthly average for January through June of 1996. For

exports, the combined total was the least since January 1991.

The Generalized System of Preferences (GSP) program was reauthorized effective October 1, 1996, to run through May 31, 1997, as part of legislation dealing with the minimum wage and other matters. The program had been allowed to expire as of July 31, 1995; the extension is retroactive to August 1, 1995. Import categories of manganese materials to which the GSP program applies, in some cases to not all otherwise eligible countries, include manganese dioxide, permanganates, sulfate, low- and medium-carbon ferromanganese, silicomanganese, and metal. other.

The Defense Logistics Agency (DLA), U.S. Department of Defense, reported for August a cash disposal from the National Defense Stockpile under DLA-ORES-071 of 1,588 tons of natural battery-grade manganese ore, all to Prince Manufacturing Co., Quincy, IL. Later actions: (1) No award was made for sale of ferromanganese for the initial offering held on September 16 under DLA-FERROMANGANESE-001. DLA subsequently rescheduled the next offering from October 22 to November 19. Copies of the solicitation can be obtained by contacting Jennifer Iribarren, telephone number (703) 767-5487. (2) On October 2, DLA announced that the Fiscal Year 1997 Annual Materials Plan was in effect. Accordingly, the maximum quantities of manganese materials to be sold under it between October 1, 1996, and September 30, 1997, were the same as previously proposed, in tons: natural battery-grade ore, 54,431; synthetic manganese dioxide, 2,732; chemical-grade ore, 36,287; metallurgical-grade ore, 362,874; ferromanganese, 45,359; and electrolytic metal, 1,814.

Australia's Broken Hill Pty. Co. Ltd. (BHP) arranged with Japan's Nippon Denko Co. Ltd. for manganese ore supplied by BHP to be toll-processed by Nippon Denko into high-carbo n ferromanganese at its Tokushima plant. This was a trial

arrangement to be carried out during the current Japanese fiscal year ending March 1997. BHP already has supplied the Tokushima plant with 30,000 tons of ore, a portion of which is to be toll-pro cessed. Ferromanganese from this arrangement is to be sent to Japanese customers of BHP.²

An article by V. L. Mazur, Minister of Industry of Ukraine, indicates that Ukraine's future manganese ore output will remain at current levels or decrease over the next decade and not return to the level just prior to the dissolution of the U.S.S.R. The article, "Prospects of Development of the Mining-

Metallurgical Complex of Ukraine," gives Ukraine's manganese ore production in million tons as 6.9 in 1990, 3.2 in 1995, 3.3 in 2000, and 2.7 in 2010. This trend is generally in line with that given for other components of Ukraine's ferrous metallurgy sector.³

¹Platt's Metals Week. V. 67, No. 33, Aug. 12, 1996, p. 8. ²——. V. 67, No. 33, Aug. 12, 1996, p. 9

³Stal'. No. 7, 1996, pp. 2-5.

$\label{eq:table 1} \textbf{TABLE 1}$ SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

		Impor	ts for consump	tion		Exports				
	Ore and		Ferroalloy		Ferroalloy					
	dioxide		and metal		Total	Ore	and metal	Total		
1995:										
July	8,600		45,600		54,200	300	1,660	1,960		
January-July	87,000		267,000		354,000	4,120	12,400	16,600		
1996:										
January	8,860	3/	47,100	3/	56,000	386	1,540	1,930		
February	1,410	3/	36,200	3/	37,600	1,620	1,670	3,290		
March	14,400	3/	46,900	3/	61,300	466	1,610	2,080		
April	32,500		61,400	3/	93,900	1,250	1,760	3,010		
May	20,400	3/	46,800		67,200	2,240	1,630	3,870		
June	26,300	3/	45,000	3/	71,300	2,550	1,230	3,780		
July	18,100	3/	19,500		37,700	1,210	841	2,050		
Total	122,000		303,000		425,000	9,720	10,300	20,000		

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 ${\bf TABLE~2} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~SILICOMANGANESE~IN~JULY~1996~1/} \\$

(Metric tons)

				Year to date		
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Argentina				7,490	4,870	\$4,910,000
Australia				26,500	17,700	18,700,000
France	2,500	1,660	\$1,320,000	20,900	13,800	11,100,000
Georgia				1,260	884	701,000
India	1,530	997	852,000	31,600	20,400	19,400,000
Kazakstan				4,000	2,290	2,300,000
Macedonia				11,000	7,460	4,910,000
Mexico	2,550	1,670	1,240,000	14,600	9,510	9,060,000
Norway	575	357	512,000	4,120	2,470	3,910,000
Poland				3,040	2,100	2,050,000
Romania				10,900	7,310	6,150,000
Russia				1,200	778	597,000
South Africa				44,200	30,200	28,400,000
Spain				1,800	1,130	1,720,000
Venezuela				12,800	8,380	8,390,000
Total	7,160	4,680	3,920,000	196,000	129,000	122,000,000
Total, general imports	7,160	4,680	3,920,000	198,000	131,000	124,000,000

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

^{3/} All or part of these data have been referred to the Bureau of the Census for verification.

 ${\bf TABLE~3} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~FERROMANGANESE~IN~JULY~1996~1/}$

(Metric tons)

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Low carbon:						
Bangladesh				28	24	\$16,700
Belgium				20	17	11,800
Brazil				20	17	39,000
Canada				42	34	53,000
Italy		551	\$1,010,000	3,190	2,850	5,170,000
Japan				1,980	1,630	2,130,000
Norway	699	584	781,000	1,070	883	1,240,000
South Africa	120	110	220,000	1,660	1,530	2,870,000
Total, low carbon	1,440	1,250	2,010,000	8,000	6,980	11,500,000
Total, general imports	_					
of low carbon	1,440	1,250	2,010,000	8,000	6,980	11,500,000
Medium carbon, 1%-2% C:	_					
Brazil				3,890	3,120	3,320,000
China	1,990	1,590	1,510,000	8,460	6,820	6,630,000
France	1,700	1,390	1,330,000	4,200	3,430	3,280,000
Japan				15,100	12,200	11,900,000
Mexico	1,920	1,540	1,550,000	15,500	12,400	12,800,000
Norway	2,540	2,080	2,060,000	2,540	2,080	2,060,000
South Africa	120	94	103,000	3,620	2,920	3,160,000
Total, m.c., 1%-2% C	8,270	6,690	6,560,000	53,300	42,900	43,100,000
Total, general imports	_					
of m.c., 1%-2% C	8,270	6,690	6,560,000	53,300	42,900	43,100,000
High carbon:	_					
Australia				18,600	13,900	7,460,000
Brazil				14,900	11,100	6,200,000
France	7,500	5,920	3,460,000	58,300	45,700	27,300,000
Mexico	_ · ·		· · · ·	6	5	3,650
Norway				56	45	66,500
South Africa	500	393	229,000	60,400	47,200	27,300,000
Total, high carbon	8,000	6,310	3,690,000	152,000	118,000	68,300,000
Total, general imports	_					
of high carbon	8,000	6,310	3,690,000	152,000	118,000	68,300,000
Grand total	17,700	14,200	12,300,000	213,000	168,000	123,000,000
Grand total, general imports	17,700	14,200	12,300,000	213,000	168,000	123,000,000

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 $\label{eq:table 4} \text{U.S. IMPORTS 1/ OF MANGANESE ORE (20% OR MORE MN) IN JULY 1996 2/}$

(Metric tons)

	20% - 479	% Mn	47% or mo	re Mn	Tota	ıl
	Gross	Mn	Gross	Mn	Gross	Mn
Source	weight	content	weight	content	weight	content
Brazil	18,700	4,640 3/			18,700	4,640
Gabon			23,900	11,600	23,900	11,600
Mexico	1,670	625	537	362 3/	2,210	986
Total	20,300	5,260	24,400	12,000	44,800	17,200
Year to date:						
Australia			68,500	34,500	68,500	34,500
Brazil	18,700	4,640			18,700	4,640
Gabon			122,000	50,800	122,000	50,800
Mexico	21,900	8,120	737	492	22,600	8,610
South Africa			27,000	12,900	27,000	12,900
Total	40,600	12,800	218,000	98,600	259,000	111,000

^{1/} Quantities for general imports and imports for consumption are identical.

^{2/} Data are rounded to three significant digits; may not add to totals shown.

^{3/} All or part of these data have been referred to the Bureau of the Census for verification.

TABLE 5 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN JULY 1996 1/

(Metric tons, gross weight)

		Manga	anese dioxide		Manganese metal				
	-		Year	r to date	Unv	vrought	Other		
		Customs		Customs					
Source	Quantity	value	Quantity	value	Quantity	Year to date	Quantity	Year to date	
Australia	1,030	\$1,410,000	12,700	\$18,000,000					
Austria			2	4,080					
Belgium	73	128,000	701	1,210,000			11	30	
Brazil			254	349,000					
Canada			5	7,940			1	8	
China			17	19,600	60	480			
France							3	46	
Germany	9	39,000	43	191,000				143	
Ireland	400	560,000	3,190	4,460,000					
Japan			6	16,400					
Mexico			4	6,480					
Russia						1			
South Africa			153	240,000	417	4,550	16	276	
Ukraine					70	90			
United Kingdom			360	504,000				152	
Total	1,510	2,140,000	17,500	25,000,000	548	5,120	31	655	
Total, general imports	1,510	2,140,000	17,500	25,100,000	584	5,450	31	655	

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Note: Imports for consumption of metallic manganese waste and scrap totaled 41 tons, of which 37 tons was from Canada and 4 tons was from Mexico, to give a year to date total of 155 tons.

Source: Bureau of the Census.

TABLE 6 U.S. EXPORTS OF MANGANESE ORE (20% OR MORE MN), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN JULY 1996 1/

(Metric tons, gross weight)

			Ferroman	iganese,					
	Manganese ore		2% or 1	less C	Silicoma	nganese	Manganese metal 2/		
	July	Year to date	July	Year to date	July	Year to date	July	Year to date	
Australia		142				2			
Belgium		2,090					36	111	
Bolivia		3							
Brazil	1,750	1,750		12		5		46	
Canada	327	2,840	424	3,570	125	3,570	27	543	
China		5,620							
Colombia				31				3	
El Salvador		354							
France		678		94				245	
Germany		478						95	
Hong Kong				6				1	
India		153						41	
Italy								16	
Japan		1,680					164	702	
Korea, Republic of		519					(3/)	92	
Mexico	71	205	10	142	4	261	33	255	
Netherlands						139	36	378	
Saudi Arabia							1	1	
Sweden	274	2,770					18	71	
Taiwan							(3/)	40	
Trinidad and Tobago		159							
United Kingdom		(3/)					20	755	
Venezuela				14					
Total	2,420	19,400	434	3,870	129	3,980	334	3,400	

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Note: Exports of ferromanganese with more than 2% carbon totaled 100 tons, of which 58 tons went to Mexico, and 42 tons went to Canada, to give a year to date total of 1,520 tons.

 $^{2/\}mbox{ Includes manganese-aluminum, some other alloys, and waste and scrap.}$

^{3/} Less than 1/2 unit.

TABLE 7 U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JULY 1996, BY CLASS 1/

				Year to	date p/ 2/
		Principal sources			Principal sources
		and destinations:			and destinations:
Gross weight	Value 3/	gross weight (metric tons);	Gross weight	Value 3/	gross weight (metric tons);
(metric tons)	(thousands)	value (thousands) 3/	(metric tons)	(thousands)	value (thousands) 3/
168	\$488	Japan 80; \$230	703	\$1,780	Japan 280; \$863
		-			
2,060	1,620	Mexico 1,460; \$630	15,000	8,660	Mexico 10,600; \$5,050
151	314	Spain 59; \$143	706	1,370	Czech Republic 324; \$615
		-			-
1	5	Canada 1; \$5	10	34	Canada 10; \$34
282	241	Canada 156; \$45	1,940	2,010	Canada 1,030; \$449
713	807	Canada 253; \$119	4,620	4,740	Canada 2,100; \$927
2,220	1,140	Canada 1,800; \$622	12,800	8,050	Canada 10,500; \$3,410
18	38	Canada 18; \$38	297	730	Germany 121; \$297
(4/)	5	Singapore (4/); \$5	141	737	Germany 79; \$369
	(metric tons) 168 2,060 151 1 282 713 2,220 18	(metric tons) (thousands) 168 \$488 2,060 1,620 151 314 1 5 282 241 713 807 2,220 1,140 18 38	And destinations: gross weight (metric tons); (metric tons) (thousands) 168 \$488 Japan 80; \$230 2,060 1,620 Mexico 1,460; \$630 151 314 Spain 59; \$143 1 5 Canada 1; \$5 282 241 Canada 156; \$45 713 807 Canada 253; \$119 2,220 1,140 Canada 1,800; \$622 18 38 Canada 18; \$38	Gross weight (metric tons) Value 3/ (thousands) gross weight (metric tons); value (thousands) 3/ Gross weight (metric tons); value (thousands) 3/ Gross weight (metric tons) 2,060 1,620 Mexico 1,460; \$630 15,000 151 314 Spain 59; \$143 706 1 5 Canada 1; \$5 10 282 241 Canada 156; \$45 1,940 713 807 Canada 253; \$119 4,620 2,220 1,140 Canada 1,800; \$622 12,800 18 38 Canada 18; \$38 297	Gross weight (metric tons) Value 3/ (thousands) gross weight (metric tons); value (thousands) 3/ (metric tons) Gross weight (thousands) Value 3/ (thousands) 168 \$488 Japan 80; \$230 703 \$1,780 2,060 1,620 Mexico 1,460; \$630 15,000 8,660 151 314 Spain 59; \$143 706 1,370 1 5 Canada 1; \$5 10 34 282 241 Canada 156; \$45 1,940 2,010 713 807 Canada 253; \$119 4,620 4,740 2,220 1,140 Canada 1,800; \$622 12,800 8,050 18 38 Canada 18; \$38 297 730

p/ Preliminary.

^{1/} Data are rounded to three significant digits.

^{2/} May include revisions to previous months' data.
3/ For imports, Customs value; for exports, f.a.s. value.

^{4/} Less than 1/2 unit.